

Work Order ID 101074

April-30-13 2:39:37 PM

\*101074\*

Page 1

Item ID: D3022-1

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Item Name: Seat Pan

3

Start Date: 4/30/13

Start Qty: 1.00

\*1\*

Required Date: 4/30/13

Req'd Qty: 1.00

\*1\*

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan: MLJ

Date: 13-05-01

Tooling:

Date:

Run Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr								
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D3022	Rev B								
-------	-------	--	--	--	--	--	--	--	--

100		0.00							
-----	--	------	--	--	--	--	--	--	--

*100*	FLOW WATER JET								
-------	----------------	--	--	--	--	--	--	--	--

Waterjet	Memo	0.00							
----------	------	------	--	--	--	--	--	--	--

FLOW CNC Waterjet	I-Cut as per Dwg D3022								
-------------------	------------------------	--	--	--	--	--	--	--	--

2024.032	Dwg Rev: B								
----------	------------	--	--	--	--	--	--	--	--

Prog Rev: B	*** grind direction along 31.700" ***								
-------------	---------------------------------------	--	--	--	--	--	--	--	--

	**NO HOLES, TRANSFER DRILLED AT ASSEMBLY***								
--	---	--	--	--	--	--	--	--	--

	2-Deburr if necessary								
--	-----------------------	--	--	--	--	--	--	--	--

110	QC2- Inspect parts off machine FAI/FAIB	0.00							
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*110*	Memo	0.00							
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QC									
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Quality Control

3 0 JmB07-31

3 0 JmB07-31

NCR: Yes / No

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>				
			Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>				
			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>				
			Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear				General							
				Bending <input type="checkbox"/>	Grain <input type="checkbox"/>	Ovalized <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>				
				Centre Not Concentric to O/S <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>				
				Cracks <input type="checkbox"/>	Broken/Damaged <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Weld <input type="checkbox"/>				
				Crushed/Crimped <input type="checkbox"/>	Burrs <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>				
				Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Part Moved <input type="checkbox"/>					
				Heat Treat <input type="checkbox"/>	Countersink <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>					
				Inspection Strip in Tube <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	Other <input type="checkbox"/>				
				Ripples in Bend <input type="checkbox"/>	Drill Holes <input type="checkbox"/>						
				Torque Waves in Extrusion <input type="checkbox"/>	Drawing <input type="checkbox"/>						
				Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>						
				Wave/Twist in Tube <input type="checkbox"/>	Folio <input type="checkbox"/>						

**Work Order ID 101074****\*101074\***

Page 2

April-30-13 2:39:37 PM

Item ID: D3022-1

Accept

**\*N900040100\***

Setup

Start

**\*NS1\***

Revision ID:

Item Name: Seat Pan

Stop

**\*NS2\***

Start Date: 4/30/13

Start Qty: 1.00 **\*1\***

Cust Item ID:

Required Date: 4/30/13

Req'd Qty: 1.00 **\*1\***

Customer:

Reference:

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	<b>*NR1*</b>
	QC:	Date:	SPC (Y/N):	Date:		Stop	<b>*NR2*</b>

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 <b>*120*</b> QC	QC8- Inspect parts - second check Memo	0.00						③ 13-07-31	PD
Quality Control		0.00							
130 <b>*130*</b> Brake NC	Bend as per dwg Memo	0.00						3	80 130731
Brake NC		0.00							
140 <b>*140*</b> QC	QC5- Inspect part completeness to step on W/O Memo	0.00						③ 13-07-31	PD
Quality Control		0.00							

NCR: Yes / No

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____		DISPOSITION			AGAINST DEPARTMENT/PROCESS						
Part No. _____		Rework	Scrap	Use-as-is	Skid-tube	Machining	Thermoforming	Large Fab	Crosstube	Water Jet	Engineering
NCR No. _____		Work Order Update						Composite	Prod. Eng. Coor.	Rec/Store/Packaging	Quality
									Supplier	Other	
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description		Sign & Date	Verification	QC Inspector
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear				General							
<input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				<input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio							
				<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions							
				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge							
				<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled							
				<input type="checkbox"/> Other							

Work Order ID 101074

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\*101074\*

Page 3

Item ID: D3022-1

Accept

\*N900040100\*

Setup

Start

\*NS1\*

Revision ID:

Item Name: Seat Pan

Start Date: 4/30/13 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 4/30/13 Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

200

Identify as per dwg & Stock Location: *W/A 007*

0.00

3

*13-7-31*

\*200\*

Packaging

Packaging

Memo

0.00

210

QC21- Final Inspection - Work Order Release

0.00

*MW 13-08-01*

\*210\*

QC

Quality Control

Memo

0.00

*MW 13-07-31*

NCR: Yes / No

DQA: Date:

## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS								
				Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>						
Root Cause		Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description		Sign & Date	Verification	QC Inspector		
Doc/Data	<input type="checkbox"/>													
Equip/Tooling	<input type="checkbox"/>													
Operator	<input type="checkbox"/>													
Material	<input type="checkbox"/>													
Setup	<input type="checkbox"/>													
Other	<input type="checkbox"/>													
Process	<input type="checkbox"/>													
Supplier	<input type="checkbox"/>													
Training	<input type="checkbox"/>													
Unapproved	<input type="checkbox"/>													
FAULT CATEGORY														
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio		<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions						<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled	<input type="checkbox"/> Other

# Picklist Print

April-30-13 2:39:37 PM

Page 1

Work Order ID: 101074

Parent Item: D3022-1

Parent Item Name: Seat Pan

Start Date: 4/30/13

Required Date: 4/30/13

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP C02.01.23Revised NG

IPP Rev:D 08-04-16 now water jet DD verified by:EC

IPP Rev:E 08-12-18 as per ECN08-582 DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.032 2024-T3 .032 sheet		Purchased	No			100	sf	629.1812	1.6232	17086316	10 S.S. Jn3-04-38		

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
MAT022	629.1812	
118243	32.4962	
118523	141	
121309	68.656	
123096	27.6	
123574	81.9	
124987	277.529	124987

NCR: Yes / No

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

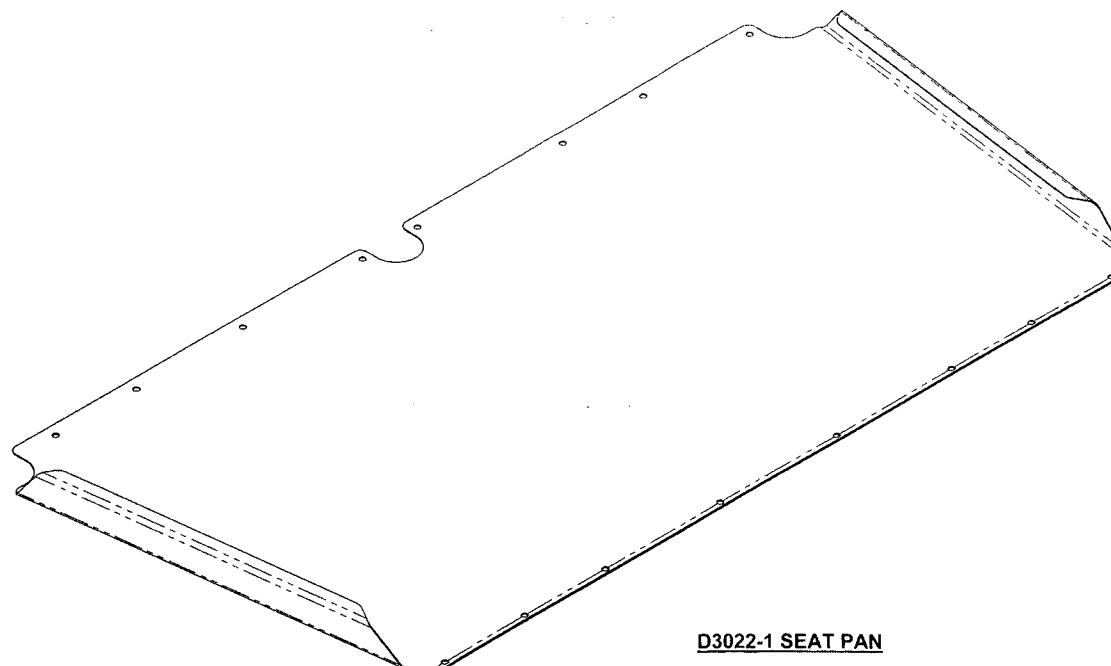
Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS														
			Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Use-as-is <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Machining <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Finishing <input type="checkbox"/>	Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/>	Quality <input type="checkbox"/>	Other <input type="checkbox"/>
Part No. _____			Work Order Update <input type="checkbox"/>																	
NCR No. _____																				
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance			Initial	Action Description			Sign & Date	Verification	QC Inspector							
Doc/Data							Chief Eng													
Equip/Tooling																				
Operator																				
Material																				
Setup																				
Other																				
Process																				
Supplier																				
Training																				
Unapproved																				
FAULT CATEGORY																				
Landing Gear	General				Grain				Ovalized				Pressure/Forced							
	Bending	<input type="checkbox"/>	Bend	<input type="checkbox"/>	Grain	<input type="checkbox"/>	Over/Under tolerance	<input type="checkbox"/>	Temperature/Cure	<input type="checkbox"/>	Part Incorrect	<input type="checkbox"/>	Weld	<input type="checkbox"/>	Wrong Stock Pulled					
	Centre Not Concentric to O/S	<input type="checkbox"/>	BOM/Route	<input type="checkbox"/>	Hardware	<input type="checkbox"/>	Part Lost/Missing	<input type="checkbox"/>	Power Loss/Surge	<input type="checkbox"/>	Part Moved	<input type="checkbox"/>	Positioned Wrong	<input type="checkbox"/>	Other					
	Cracks	<input type="checkbox"/>	Broken/Damaged	<input type="checkbox"/>	Inspection Incomplete	<input type="checkbox"/>	Offset	<input type="checkbox"/>												
	Crushed/Crimped	<input type="checkbox"/>	Burrs	<input type="checkbox"/>	Instructions Incomplete/Unclear	<input type="checkbox"/>	Out of Calibration	<input type="checkbox"/>												
	Cuffs	<input type="checkbox"/>	Contamination	<input type="checkbox"/>	Maintenance	<input type="checkbox"/>	Out of Sequence	<input type="checkbox"/>												
	Heat Treat	<input type="checkbox"/>	Countersink	<input type="checkbox"/>	Mislabeled	<input type="checkbox"/>	Outside Dimensions	<input type="checkbox"/>												
	Inspection Strip in Tube	<input type="checkbox"/>	Cut Too Short	<input type="checkbox"/>																
	Ripples in Bend	<input type="checkbox"/>	Drill Holes	<input type="checkbox"/>																
	Torque Waves in Extrusion	<input type="checkbox"/>	Drawing	<input type="checkbox"/>																
	Turning Sequence	<input type="checkbox"/>	Finish	<input type="checkbox"/>																
	Wave/Twist in Tube	<input type="checkbox"/>	Folio	<input type="checkbox"/>																

DART AEROSPACE LTD	Work Order:	101079
Description: Seat Pan	Part Number:	D3022-1
Inspection Dwg: D3022	Rev: B	Page 1 of 1

## FIRST ARTICLE INSPECTION CHECKLIST

Measured by:	Jm	Audited by:	PD	Preliminary Approval:	
Date:	13-07-31	Date:	13-07-31	Date:	

Rev	Date	Change	Revised by	Approved
A	08.06.13	New Issue	KJ/DD	
B	11.06.21	Dwg Rev updated	KJ	



D3022-1 SEAT PAN

SHEET 1 OF 1  
 P1200010  
 ENCL A P120010  
 UNCONTRIBUTED COPY  
 SUBJECT TO AMENDMENT  
 WORK ORDER

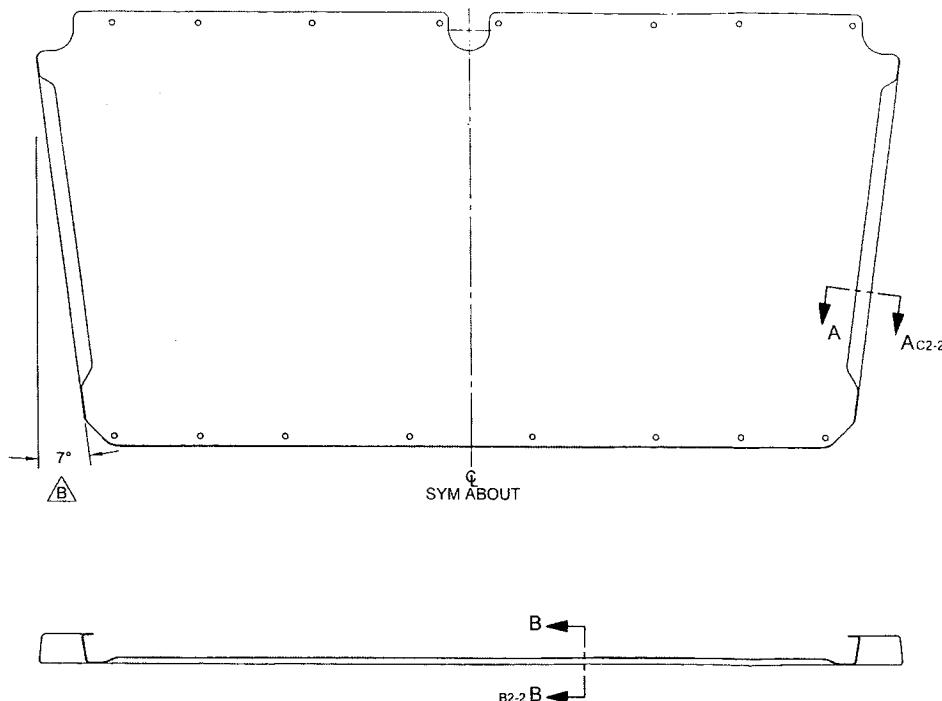
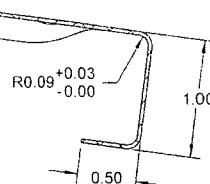
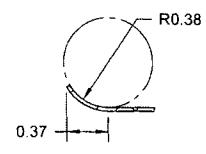
NO. 101074.M05  
 13-05-01

**RELEASED**  
*08/12/15 M05*

B	REDRAWN IN SOLIDWORKS TO CURRENT DESIGN STANDARDS AND TRANSFERRED TO "B" SIZE BORDER. SPLIT VIEWS FOR FORMED PART AND FLAT PATTERN. B7-2.7 DIM ADDED. D7-3 12.075 WAS 12.325, D6-3 9.175 WAS 9.425 & D5-3 5.300 WAS 5.550. REASON: DRAFTING ERROR.			AJS	08.11.27
A	NEW ISSUE			CP	01.05.18
REV.	DESCRIPTION			BY	DATE
DESIGN	CP	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA			
DRAWN	AJS	DRAWING NO.	D3022	REV. B	SHEET 1 OF 3
CHECKED		MFG. APPR.			
APPROVED		DE APPR.		TITLE	SCALE
DATE	08.11.27			SEAT PAN	NTS

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8 1 7 1 6 1 5 1 4 1 3 1 2 1 1 1

D3022-1 SEAT PAN SECTION A-A C4-2  
SCALE 4XSECTION B-B A6-2  
SCALE 4X

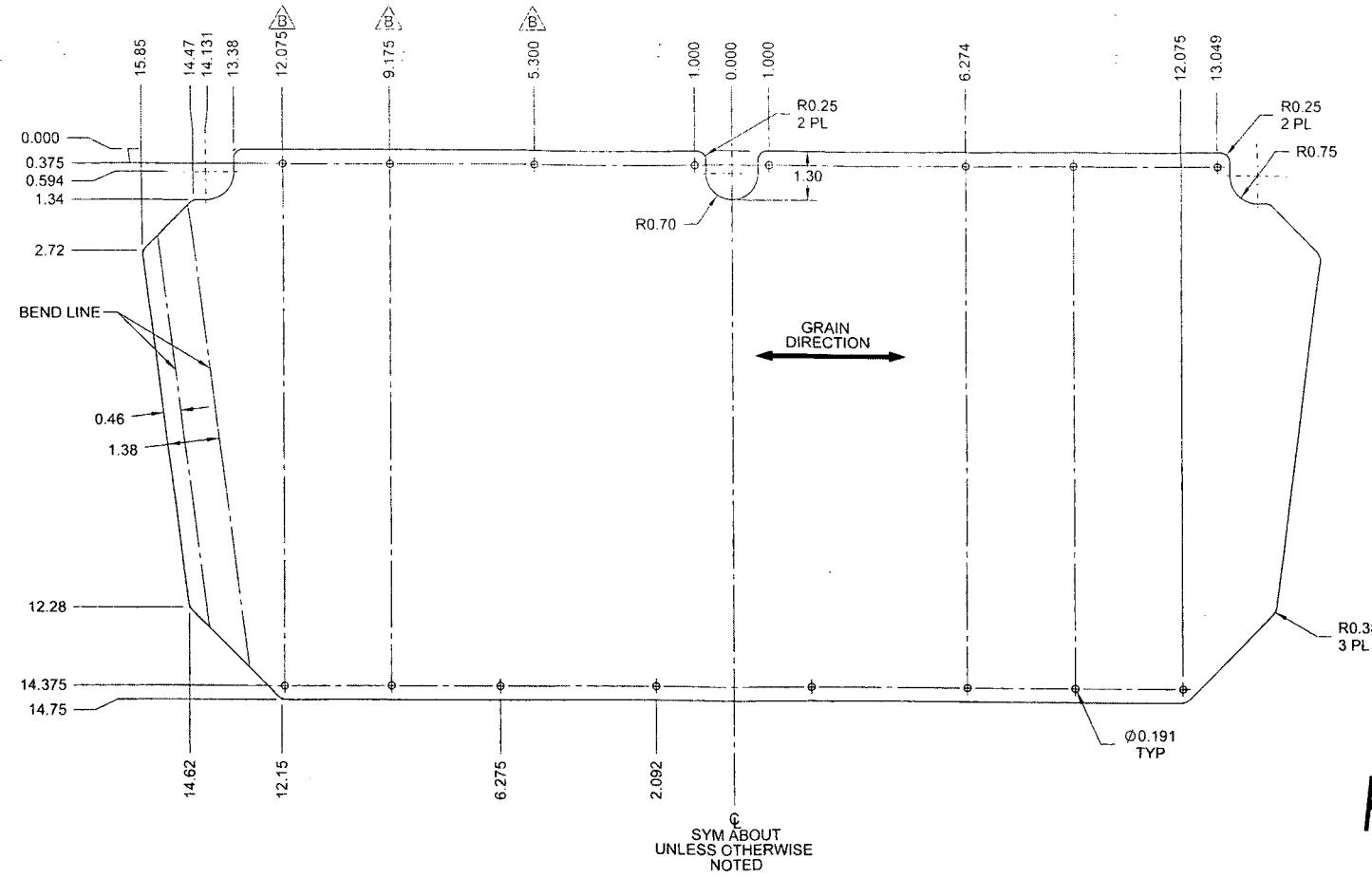
RELEASED  
08/12/15 NY

NOTES:

- 1) MATERIAL: MAKE FROM D3022-1F
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT GREY SANTEX (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART PIN "D3022-1" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 1.36 lbs

8 7 6 5 4 3 2 1

DESIGN	CP	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
		D3022	SHEET 2 OF 3
MFG. APPR.		TITLE	SCALE
APPROVED		SEAT PAN	NTS
DE APPR.			
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RELEASE  
08/12/15 JVW

## NOTES

NOTES:  
1) MATERIAL: 2024-T3 ALUMINUM SHEET, 0.032 THICK  
PER AMS-QQ-A-250/4 OR AMS 4037  
REF DART SPEC M2024T3S.032  
2) FINISH: N/A  
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED  
4) UNITS: INCHES UNLESS OTHERWISE NOTED  
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX  
6) IDENTIFICATION: N/A  
7) WEIGHT: 1.36 lbs

D3022-1F SEAT PAN 

DESIGN	CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWN	AJS	DRAWING NO. REV. E		
CHECKED		D3022 SHEET 3 OF 3		
MFG. APPR.		TITLE SCAL		
APPROVED		SEAT PAN NTS		
DE APPR.				
DATE	08.11.27	COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED OR FOR ANY PURPOSE, COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT		

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